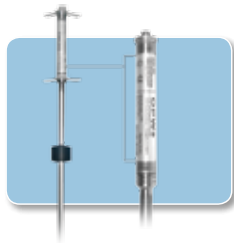




# SiteSentinel<sup>®</sup> **Nano**<sup>®</sup>

The SiteSentinel<sup>®</sup> Nano<sup>®</sup>  
Tank Gauge • Probes • Sensors



# Overview

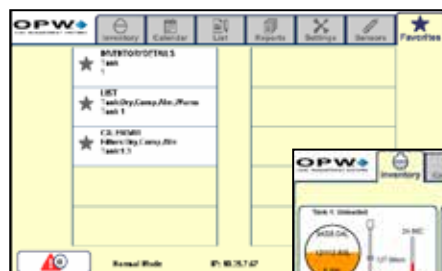
## Easy and Reliable Tank Gauging

Designed for ease-of-use and streamlined remote accessibility, the SiteSentinel® Nano® offers a reliable and simple tank gauging solution to both large and small sites. The Nano's small equipment footprint makes it the perfect fit for any station, providing the flexibility to install your gauge in even the most space-conscious location.

### Simple-to-Use Software

Driven by the fueling industry's most user-friendly software interface and remote access functionality, the Nano is the easiest gauge on the market to learn and interact with.

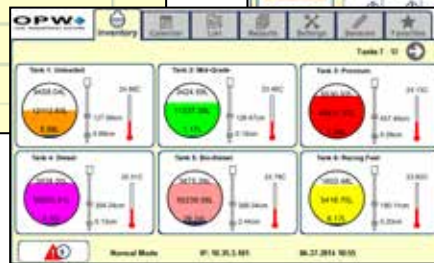
Leverage the Nano's unique feature set to streamline your day-to-day operations, reduce labor costs and minimize training times and expenses.



Favorites View



Calendar View



Tank View



### Reliable Inventory Management

Engineered with the same outstanding quality and advanced technology that's made OPW the industry standard in tank gauging, the Nano ensures reliable and accurate inventory data, as well as minimal downtimes or need for system maintenance.

SAVE UP TO  
**40%**  
ON A TYPICAL INSTALLATION

### Unparalleled Affordability

The Nano comes out of the box fully functional at a competitive fixed price, with a number of optional add-ons available to enhance its already robust feature set. Equipped with OPW's patented SiteSentinel® Multi-Drop technology, the Nano also drastically reduces installation costs when compared with competitive gauges.

# SiteSentinel® Multi-Drop and Remote Accessibility

Built in to the Nano® as standard features, OPW's patented SiteSentinel® Multi-Drop technology and remote accessibility offer a unique combination of cost and logistics benefits that cannot be found with any competing gauges on the market.

## The Benefits of SiteSentinel Multi-Drop

SiteSentinel Multi-Drop technology enables multiple probes to be run back to the Nano on one wire.

This drastically reduces the amount of wire and labor needed when installing the gauge, reducing the costs of installation in both new and pre-existing sites.

- Slash wiring and labor costs for your Nano-equipped installations (see illustration below)
- Decrease site downtime needed for gauge installation or maintenance
- Achieve significantly lower site installation costs

**OPW Mixed Multi-Drop Technology**

OPW's mixed Multi-Drop technology allows probes and sensors to be run on one wire back to a tank gauge. This leads to substantial savings on installation labor and wire costs.

With mixed Multi-Drop, the SiteSentinel® Nano® can hold up to 12 probes or 48 sensors in any combination. Possible combinations are driven by a point system: one probe = three points; one sensor = one point.

Each of the Nano's four barrier positions can hold a total of 12 points, which can be obtained by 4 probes, or 12 sensors or a combination of probes and sensors.

**SiteSentinel® Nano® Internal I.S. Barrier**

1	2	3	4
---	---	---	---

**4 probes = Total: 12 points**

**3 probes = 9 points**  
**+ 3 sensors = 3 points**  
**Total: 12 points**

**1 PROBE = 3 POINTS**    **1 SENSOR = 1 POINT**

**2 probes = 6 points**  
**+ 6 sensors = 6 points**  
**Total: 12 points**

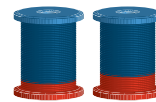
**12 sensors = Total: 12 points**

## Multi-Drop Technology versus Competing Gauges

Multi-drop technology helps eliminate installation wire waste by reducing the need for long runs back to the gauge, which can often account for the usable majority of an entire wire spool.

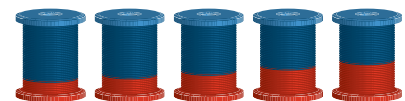
### Installation Wire Waste with the Nano

253 m installed | 52 m wasted



### Installation Wire Waste with Competing Gauges

570 m installed | 192 m wasted



## Remote Accessibility



With the ability to directly interact with the gauge from most web-enabled devices, the Nano provides a number of benefits to any operation's workflow. From initial employee training to emergency support capabilities, users with remote access can control the gauge as if they were present at your site.

- Access data and interact with the gauge from anywhere on most devices
- Train employees on gauge-related processes from a central off-site location
- Streamlined troubleshooting processes allow support professionals to see exactly what's occurring with your gauge in real time
- Software updates and upgrades can be implemented remotely
- Remote backup functions ensure users never lose historical inventory or alarm data

# Real-Time Inventory Data Anywhere You Are

## The SiteSentinel<sup>®</sup> Nano<sup>®</sup>

OPW's SiteSentinel<sup>®</sup> Nano<sup>®</sup> tank gauge delivers a user-friendly interface in a compact console. The intuitive user interface provides real-time, accurate inventory information through a large color touchscreen. Users can schedule the system to perform leak detection tests and run reports daily, weekly, monthly and yearly.

## Applications

- The console's small equipment footprint makes it ideal for fueling operations of all sizes
- The gauge accommodates 12 probes and 24 sensors, allows future system upgrade
- Multi-Drop technology can reduce installation costs by minimizing the wiring and labor required for a quick installation
- Web-based interface enables remote use and training



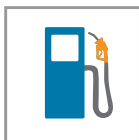
### INTUITIVE

The gauge's 18 cm color touchscreen provides easy access to inventory, compliance, delivery, warnings and alarms



### USER-FRIENDLY

The Nano's user-friendly software offers a calendar view and a "Favorites" list for quick recall of the most-used filters



### VERSATILE

With a small equipment footprint and cost-saving Multi-Drop technology, the Nano meets the needs of any fueling operation



### CONVENIENT

Online access enables off-site training as well as remote troubleshooting and remote monitoring of inventory, leak detection and compliance information

# SiteSentinel® Nano® Console

## System Features

- User-friendly interface features simple, easy-to-recognize icons
- Calendar view shows alerts for deliveries, compliance, alarms and warnings that can be filtered by event and/or tank
- A "Favorites" list enables quick recall of the most-used filter settings
- Monitors up to 12 probes (up to a maximum of four probes per barrier position)
- Internal barrier permits multi-dropped sensors and probes
- Automatic Calibration and Reconciliation (ACR) ensures the SiteSentinel® Nano® reconciles fuel consumption and deliveries
- Displays gross- or net-corrected tank volume, ullage, product volume and water, product level and water level, and product temperature for individual tanks
- Able to schedule reports to automatically run daily, weekly, monthly or yearly
- Programmable Automatic Leak Detection performs hourly, daily, weekly, and monthly static leak tests
- Local or remote PC connection
- Alarm notifications issued via email, fax, SMS
- Optional Tank Overfill Alarm
- Console is configured through an HTML web interface. No added hardware or proprietary software is needed for remote connections.
- Networking screen allows user to select either a Static connection or DHCP
- A "blank door" unit is available for fueling sites that will operate the console through remote connection only
- Optional OM4 Output Module expands functionality to an additional four output relays
- Reports include Current Inventory, Delivery History, Events in Progress, Event History, Leak Test
- Auto Detect feature shows the number of devices connected to each of the internal barrier positions. Devices that are connected during startup will be detected automatically.
- Includes address book of contacts to whom the unit can send text messages, fax and/or emails on any alarms and events
- Configurable to meet localized settings (Date/time formats and metric/English units)
- Meets Weights and Measures standards in countries where required
- Communicates with most industry-standard third-party POS protocols
- Optional density measurement sensor can monitor product quality. Fuel density reports can be shown in real time on the console.

## Specifications

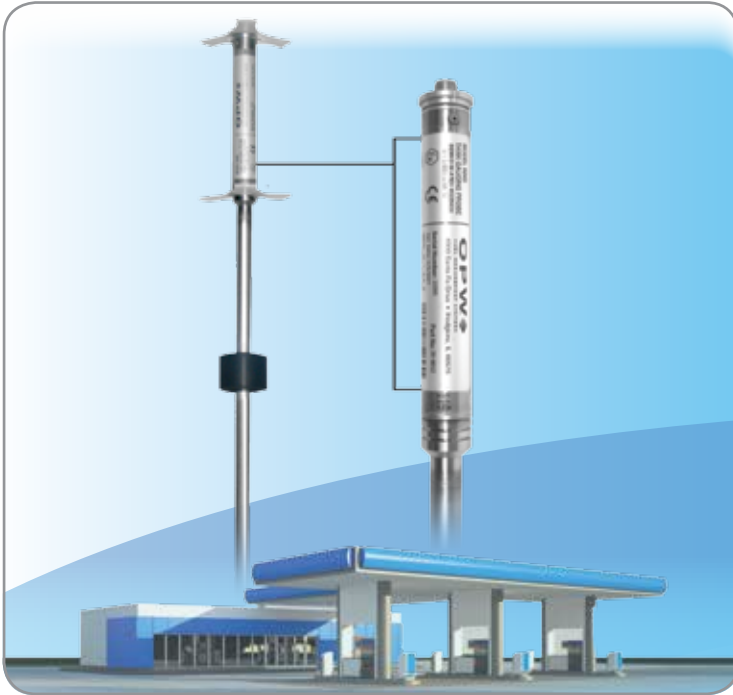
- Dimensions: 21 cm H x 32.5 cm W x 6 cm D
- Power: 120/240 VAC +/- 10%, 50/60 Hz, 30 W
- Operating Temperature Range: 0°C to 50°C
- Display: 18 cm color LCD touchscreen display
- Graphical user interface
- Printer: External USB
- Standard Alarms: Buzzer, Light and Acknowledge
- Optional Alarms: External Tank Alert (internal relay)
- Alarm Notifications: Email, Fax, SMS
- Network Connectivity: DHCP/static addressable RJ-45 Ethernet ports, supports corporate and local LANs
- Communication Ports:
  - One (1) RS-232 Communication port
  - One (1) RS-485 Communication port
  - One (1) RS-422 Communication port
  - One (1) Ethernet port
  - Two (2) USB ports
  - Two (2) Internal inputs
  - Two (2) Internal outputs

## System Alarms and Events

- High Temperature
- Low Temperature
- Reconciliation Theft
- Fail RTD/Thermistor
- Delivery Start / Finish
- In-Tank Leak Test Failure
- In-Tank Test Warning
- Product High-High
- Product High
- Product Low-Low
- Product Low
- Water High-High
- Water High
- Probe Failure

# 924B Probe

## Precision Inventory Management



### The 924B Probe

The 924B Magnetostriuctive Probe features standard stainless-steel construction, making it the ideal inventory measurement solution for any gasoline, diesel, ethanol or biodiesel application. Available in lengths from 1.35 m to 3.79 m, OPW 924B probes are designed to provide accurate fuel level readings no matter the size of your tanks.

### Applications

- As a level 1 probe, the 924B is engineered to cater to the specific needs of most tank applications
- Multi-drop capability allows up to four probes to be connected on a single I.S. module (compatible gauges only)
- Optional density floats provide a measure of all changes in product density within a specified API density range
- Streamlined installation process ensures simple installation in both 5.1 cm and 10.2 cm riser systems



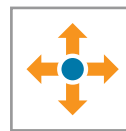
#### PRECISE

Capable of measuring product changes to a resolution of 0.0127 mm



#### RELIABLE

ISO 17025 certification ensures OPW probes meet strict performance standards



#### VERSATILE

With numerous length and float kit options available, a configuration exists for nearly any facility's needs



#### DURABLE

A rugged stainless-steel design prevents in-tank corrosion or degradation

### Specifications

- Measures product level changes to a resolution of 0.0127 mm
- Measures product temperature changes to a resolution of 0.1° C
- Measures water level changes to a resolution of 0.254 mm
- Linearity over the entire probe length is  $\pm 1$  mm
- Material: Stainless-steel body, nickel-coated brass cap
- Location: Hazardous, Class 1, Division 1, Group D
- Temperature Range: -40° C to + 70° C
- Data Cable: 305 m Belden 88760; 152 m max. Belden 88761

# OPW Sensors

## Comprehensive, Innovative Site Monitoring Technology



### The Smart Sensor™ for SiteSentinel® Gauges

OPW Smart Sensors inform you of their connection status, eliminating concerns over whether or not sensors are connected to the tank gauge console.

#### **Record it. Replace it.**

The Nano records all relevant product data upon sensor installation, including part number, install date and sensor type. This ensures simple, error-free ordering and installation of replacement sensors.

#### **Multi-drop. Save money.**

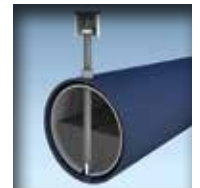
Our Smart Sensor technology enables the daisy chaining of sensors during the critical installation period. This eliminates direct wiring runs back to the SiteSentinel™ console inside the building, leading to cost savings.



SiteSentinel Smart Part Number: 30-0231-L

### Single Level Sump Sensor

- Detects liquid in sumps, dispenser pans and other locations where its very presence could indicate a leak has occurred



SiteSentinel Smart Part Numbers: 30-0230-S

### Liquid Only Interstitial Sensor

- Used primarily in the interstitial area of double-wall tanks
- Can also be used in sumps and dispenser pans
- Contains a float switch that activates in the presence of liquid



SiteSentinel Smart Part Number: 30-0235-V

### Hydrocarbon Vapor Sensor

- Detects hydrocarbon vapors in monitoring wells and the interstitial areas of a double-wall tank



SiteSentinel Smart Part Number: 30-0232-DH-10 and 30-0232-DH-20

### Fuel Sump Sensor

- Detects liquid hydrocarbons in STP sumps, dispenser pans and other locations where their very presence could indicate a leak has occurred

Operations in Europe,  
 Middle East and  
 Africa

**1 OPW Sweden/KPS**

OPW Sweden AB  
 Box 70  
 736 22 Kungsör  
 Sweden  
 +46 227 422 00

**2 OPW Czech Republic**

Dover CR spol. s.r.o.  
 Prumyslova 4  
 431 51 Klasterec nad Ohri  
 Czech Republic  
 +420 474 624 025

**3 Fibrelite Composites Ltd**

Snaygill Industrial Estate  
 Keighley Road, Skipton  
 North Yorkshire BD23 2QR  
 United Kingdom  
 +44 1756 799 773

**4 OPW France**

73 avenue Carnot  
 FR-94230 Cachan  
 France  
 +33 1 4663 0400

**5 OPW Slovakia**

Antolská 4  
 SK-85107 Bratislava  
 Slovakia  
 +42 1 911 886 613

**6 OPW CIS**

Gilyarovskogo str. 4,  
 office 303  
 Moscow 129090  
 Russia  
 +7 495 287 96 99

**7 OPW FMS Poland**

Petro Vend sp. z o.o.  
 ul. Warszawska 184  
 32-086 Węgrzce  
 Poland  
 +48 12 4106600

**OPW Retail Fueling**

Components and products to protect the environment and the consumer at retail fueling sites for conventional and alternative fuels.

**OPW Electronic Systems**

Innovative electronic tank gauges and fuel control systems to ensure customers know how much fuel they have and where it is going. Also, Automated Vehicle Wash Systems.

**OPW Chemical & Industrial**

Safe and efficient loading and unloading of critical hazardous chemicals: loading arms, swivel joints, sight flow indicators, quick and dry disconnect couplers, and safety breakaways.

**OPW Transportation**

Components and systems for use on Tank Trucks and Rail Tank Cars to ensure the safe handling, loading, transport and unloading of hazardous bulk products, including: petroleum, chemical and dry bulk cargo.